

Notes:

1. Solve this assignment using Microsoft Word program.
2. Submit your assignment-solution through *Ritaj* only.
3. The assignment should be submitted on the due date, late submission will **NOT** be accepted for any reason.
4. The assignment is **individual** effort. Copying the solution from others will be treated as a cheating case, which may lead to fail the course.
5. Please write your name (in Arabic and in English), Student NO., and Lab Section NO. clearly.

Question #1

Assume you are working in teamwork for designing new buildings. The new designs must consider carefully the number of **emergency exits** (مخرج طوارئ) the building should have; depending on number of people in this building.

You as a computer programmer, write an **algorithm** to read number of persons supposed to live in this building. Then, the algorithm determines and prints out the suitable number of emergency exits according to the following table:

Number of persons	Number of emergency exits
50 or less	1 exit
51- 175	3 exits
176- 320	5 exits

If number of persons is above 320, number of emergency exits calculated as the following equation:

$$\text{Number of emergency exits} = \frac{\text{No. of persons}}{100} * 1.8$$

Question #2

Write an **algorithm** to read number of Palestinian populations in 2019. The number of populations increases by a fix rate of 2.8% per year. Write an algorithm that finds the year in which the number of Palestinian populations will exceeds the double (i.e. twice) current number.